1907MNRAS..67..194E

New Double Stars. By Rev. T. E. Espin.

No.	B.D.	R.A.	Decl.	P.	D.	Mags.		Date.	Nights.
		1900.	1900.					1900+.	
		h m	° ′	°	″				
312	...	0 12·0	+34 35	237·3	2·15	9·6	10·0	6·95	2
313	+32·58	0 18·2	+32 27	16·3	3·95	8·7	12·7	6·95	2
314	+28·95	0 30·6	+28 41	201·7	8·36	8·5	14·0	6·77	3
315	+28·101	0 32·5	+28 40	77·7	2·04	9·1	9·4	6·78	3
316	+32·154	0 47·3	+32 43	292·3	1·92	9·3	9·7	6·95	2
317	...	0 54·9	+31 56	187·1	6·59	9·2	9·4	6·71	2
318	+30·223	1 21·0	+30 55	71·0	2·72	9·5	11·0	6·71	2
319	+32·256	1 22·9	+33 2	290·7	1·75	9·3	9·8	6·95	1
320	+33·310	1 46·5	+33 25	161·2	1·87	8·5	9·5	6·95	2 AB
				259·8	9·95	C=	10·0	6·95	2 AC
321	+29·333	1 51·6	+30 5	181·2	3·63	9·2	10·0	6·82	2
322	+32·374	1 59·6	+32 39	92·2	2·32	9·5	9·6	6·96	2
323	+33·425	2 21·9	+33 39	179·8	6·35	9·1	10·3	6·96	2
324	+28·448	2 33·2	+28 28	20·2	1·80	9·1	11·0	6·97	1 BC
				185·8	32·75	A=	9·0	6·97	1 AB
325	+30·465	2 49·8	+31 10	0·1	12·92	7·9	12·5	6·94	3
326	+31·536	2 59·6	+31 39	36·1	4·79	9·8	10·8	6·91	3 BC
				35·8	102·33	A=	8·0	6·88	2 AB
327	+32·652	3 33·5	+33 9	292·9	14·00	8·3	12·0	6·95	1
328	+34·761	3 47·1	+34 46	288·4	6·82	8·3	14·0	6·99	2
329	+30·601	3 53·7	+30 31	255·9	7·27	9·0	12·5	6·94	3
330	+31·834	4 51·7	+31 7	156·1	3·95	9·2	12·0	6·92	2
331	+35·971	4 59·1	+35 32	324·0	7·60	8·6	11·0	6·95	1
332	+33·1017	5 14·8	+33 17	210·1	14·65	8·3	8·5	6·95	2
333	+31·936	5 15·2	+31 22	36·7	3·37	9·2	9·3	6·92	2
334	S 483	5 21·8	+33 42	347·9	15·09	8·0	14·0	6·11	2 BC
				50·5	95·48	A=	7·0	6·11	2 AB (S. 483)
335	+32·1012	5 23·9	+32 34	330·6	2·65	9·1	9·2	6·95	1
336	+31·1027	5 31·0	+31 43	258·6	8·47	8·7	9·0	6·92	2
337	+31·1191	5 49·0	+33 13	296·7	5·45	9·1	12·0	6·92	2
338	+36·1361	6 0·9	+36 37	19·5	8·17	8·5	11·5	6·94	2
339	+32·1460	6 54·8	+32 33	186·7	16·40	6·5	13·0	7·04	2
340	+31·1491	7 0·1	+31 51	139·5	5·62	9·0	9·2	6·94	2
341	+32·1522	7 13·0	+32 37	251·6	3·05	9·0	9·0	6·95	1
342	...	17 52·0	+31 21	235·4	5·82	9·0	10·7	6·67	2
343	+31·3133	17 52·7	+31 12	282·8	8·46	9·0	11·7	6·69	2
344	+33·2994	17 53·6	+33 52	30·7	8·96	8·6	9·1	6·63	2

1907MNRAS..67..194E

No.	B.D.	R.A. 1900.	Decl. 1900.	P.	D.	Mags.		Date. 1900+.	Nights.
		h m	° ′	°	″				
345	+31·3195	18 7·3	+31 22	19·4	2·45	9·1	9·3	6·64	2
346	+32·3102	18 17·1	+32 10	307·0	6·10	9·5	13·0	6·58	2
347	+32·3103	18 17·2	+32 17	66·6	1·75	9·0	9·2	6·62	4
...	+29·3420	18 54·4	+30 1	172·3	17·91	9·0	9·4	6·71	2
348	+28·3210	19 5·0	+28 15	256·3	5·53	8·7	11·2	6·76	2
349	+31·3482	19 6·8	+31 35	220·8	6·65	9·3	13·0	6·58	2
350	+31·3487	19 7·0	+31 57	235·3	5·41	8·5	9·3	6·58	2
351	+33·3398	19 13·3	+33 21	82·4	6·15	8·8	11·0	6·81	1
352	+34·3504	19 17·1	+34 15	133·0	4·67	8·9	10·0	6·81	1
353	+33·3457	19 23·7	+33 7	296·4	3·36	8·6	10·2	6·75	3
354	+31·3785	19 44·5	+31 29	324·4	9·20	8·6	11·5	6·74	4
355	+31·3814	19 48·1	+31 27	294·8	13·05	7·4	13·0	6·70	3
356	+31·3816	19 48·3	+31 24	343·1	5·74	8·9	9·8	6·70	3
357	OΣ 389	19 48·7	+30 52	306·5	9·42	6·5	12·0	6·66	3 AB
				183·4	12·57	C=	8·5	6·66	3 AC (OΣ 389)
358	+31·3914	19 59·7	+31 33	197·3	7·42	8·6	10·0	6·63	3
359	+31·3915	19 59·8	+31 28	61·1	5·71	11·5	13·0	6·60	2 BC
				131·8	27·91	A=	6·5	6·60	2 AB
...	+30·3900	20 2·9	+30 58	62·3	27·37	8·8	9·5	6·78	3 AB
				251·2	33·40	C=	9·3	6·78	3 AC
360	...	20 3·5	+30 48	78·2	2·74	9·8	9·9	6·66	2
361	+30·3908	20 4·0	+30 23	113·5	4·82	9·0	11·0	6·68	2
362	+30·4008	20 19·0	+30 16	268·2	4·48	11·0	13·2	6·67	2 BC
				229·4	9·18	A=	8·7	6·67	2 AB
363	+30·4018	20 19·4	+30 33	280·4	3·05	9·3	9·3	6·71	3
364	+31·4089	20 23·4	+31 25	277·3	8·47	8·7	12·5	6·66	3
365	+31·4125	20 29·0	+31 25	288·2	2·50	12·0	12·1	6·81	3 CD
				262·1	25·72	7·7	11·5	6·73	2 AB
				318·9	33·68	...		6·81	3 AC
366	+30·4159	20 40·4	+31 2	122·7	3·29	9·1	13·0	6·69	2
367	+29·4161	20 41·0	+29 52	242·5	7·27	9·1	14·0	6·88	1
368	+30·4180	20 43·9	+30 38	357·9	2·88	9·5	9·6	6·64	2
369	+31·4226	20 44·6	+31 37	300·4	6·73	8·9	12·0	6·69	2
370	+31·4227	20 45·0	+31 26	39·2	5·81	9·3	13·5	6·81	3
371	+30·4227	20 49·9	+31 0	132·7	3·67	9·0	9·3	6·66	3
372	+31·4272	20 52·1	+31 35	144·2	2·97	9·1	9·4	6·74	4
373	...	20 54·6	+29 56	147·4	2·49	9·8	11·5	6·69	2
374	+31·4319	20 58·6	+31 22	230·4	4·5±	11·0	13·6	6·81	3
				137·1	24·78	A=	8·2	6·75	2

1907MNRAS..67..194E

No.	B.D.	R.A. 1900. h m	Decl. 1900. ° ′	P. °	D. ″	Mags.	Date. 1900+.	Nights.
375	+30·4335	21 4·6	+30 38	221·9	4·40	9·0 9·5	6·64	2
376	+30·4411	21 17·9	+30 20	214·7	10·61	8·6 12·7	6·78	2
377	+31·4430	21 18·1	+31 13	210·0	2·49	9·7 10·0	6·84	2 BC
				290·8	49·38	A= 9·1	6·84	2 AB
378	+31·4470	21 24·7	+31 58	202·7	7·74	8·6 11·0	6·69	2
379	+29·4444	21 28·9	+29 48	300·3	8·77	9·0 10·5	6·72	2
380	+29·4452	21 30·4	+29 50	310·9	2·46	11·2 11·5	6·74	3 CD
				52·2	13·85	8·5 14·0	6·79	1 AB
				106·9	57·85	...	6·71	2 AC
381	+31·4539	21 40·5	+31 17	109·5	4·89	8·7 13·5	6·59	2
382	+31·4560	21 46·6	+32 11	319·1	10·95	7·7 14·0	6·73	6 AB
				320·4	60·22	C= 7·8	6·81	1 AC
383	+34·4586	21 57·0	+34 43	168·1	4·62	9·2 11·6	6·95	2
384	+31·4612	21 58·4	+31 41	66·5	2·99	9·1 9·2	6·63	2
385	+32·4340	22 2·4	+34 6	35·6	5·17	9·0 10·5	6·94	2 AB
				36·2	33·60	C=10·0	6·95	1 AC
386	+33·4427	22 2·5	+33 5	75·7	6·95	8·6 12·7	6·94	2
387	...	22 5·0	+32 53	268·5	1·65	10·0 10·2	6·74	4
388	+31·4653	22 8·8	+31 38	262·6	7·56	8·8 9·3	6·65	2
389	+29·4620	22 11·6	+30 7	261·7	7·38	9·0 10·0	6·72	2
390	+32·4406	22 18·2	+32 57	262·1	13·98	9·0 9·3	6·75	3
391	+29·4687	22 28·3	+29 50	347·1	5·64	9·2 11·2	6·79	3
392	8 Lacertæ	22 31·4	+39 6	224·7	9·36	8·8 13·2	6·90	4 Dd
				185·4	21·66	...	6·86	1 AB (Σ 2922)
				154·3	28·14	...	6·86	1 BC ,,
				115·9	41·67	...	6·86	1 CD ,,
393	+30·4785	22 38·9	+30 42	259·4	9·43	8·8 12·0	6·64	2 BC
				297·5	78·48	A= 8·5	6·63	1 AB
394	+29·4764	22 42·3	+30 4	338·9	4·57	9·1 11·1	6·80	2
395	+29·4812	22 51·8	+30 6	351·3	4·05	9·2 12·0	6·71	2
396	...	22 58·7	+30 50	27·7	3·81	9·3 9·4	6·67	2
397	+32·4598	23 5·6	+32 36	151·8	5·55	9·2 11·4	6·94	2
398	...	23 18·8	+31 45	264·2	4·09	9·1 11·0	6·67	2
399	+29·4937	23 24·3	+29 17	207·1	8·53	9·3 12·0	6·76	2
400	+29·4938	23 24·6	+29 18	211·3	6·40	9·3 9·9	6·76	2
401	+29·4970	23 31·8	+30 14	71·8	1·60	9·3 11·5	6·92	2
402	+31·4949	23 34·8	+32 5	88·1	4·15	9·2 13·0	6·91	1
403	+30·5001	23 35·7	+30 34	294·7	2·75	9·2 9·5	6·92	2

1907MNRAS..67..194E

Notes.

322 Discordant angles.

325 Observed, in the first instance, in mistake for *h* 329.

332 A fine pair, not given in any double star catalogue as far as I am aware.

334 South's measures are :—

P. 30° 53′ Nf D. 87″·602, 1825·11. The change is due to the proper motion of A, which, according to Argelander (Bonn Observations, vol. viii.) is 0″·20 at 202° 49′, according to Porter 0″·19 at 180°. The measures of South and my own give 0″·195 at 174°·1. A. has two faint *comites* Nf and Sf.

337 Closely p *h* 713.

351, 352 The second night's measures were obtained with difficulty, through a fog.

357 There seems to be no notice of the closer *comes* in the measures of previous observers. It is a fairly easy object, even in moonlight.

365 BC Angles discordant.

374 Measures of BC very uncertain.

377, 380 Angles of BC discordant.

387 A little pair N of π Pegasi.

392 The faint *comes*, d, was detected in 1892, but has not hitherto been measured.

Observations of the Occultation of Saturn by the Moon, 1906 October 27.

By John Tebbutt.

The sky was beautifully clear and the definition good during the observation of this phenomenon. A magnifying power of 74 diameters was employed on the 8-inch equatorial. The following are the observed local mean times of the different phases :—

	h	m	s
Ring began to disappear . . .	8	17	57·3
Bisection of ball	8	18	17·3
Simultaneous disappearances of ball and following edge of ring . .	8	18	48·2
Disappearance of Titan . . .	8	20	9·9
Ball began to emerge . . .	9	33	39·5
Last contact of ball . . .	9	34	21·4
Last contact of ring . . .	9	34	58·3

The beats of the chronometer were inaudible at the disappearance. The times were therefore noted by turning the eye instantly from the eyepiece to the face of the chronometer. A large fraction of a second was, doubtless, lost in this way, and the times were consequently noted rather late. The first contact of the ball was unfortunately missed, as it followed so quickly after that of the ring. At the reappearance the chronometer beats were audible,